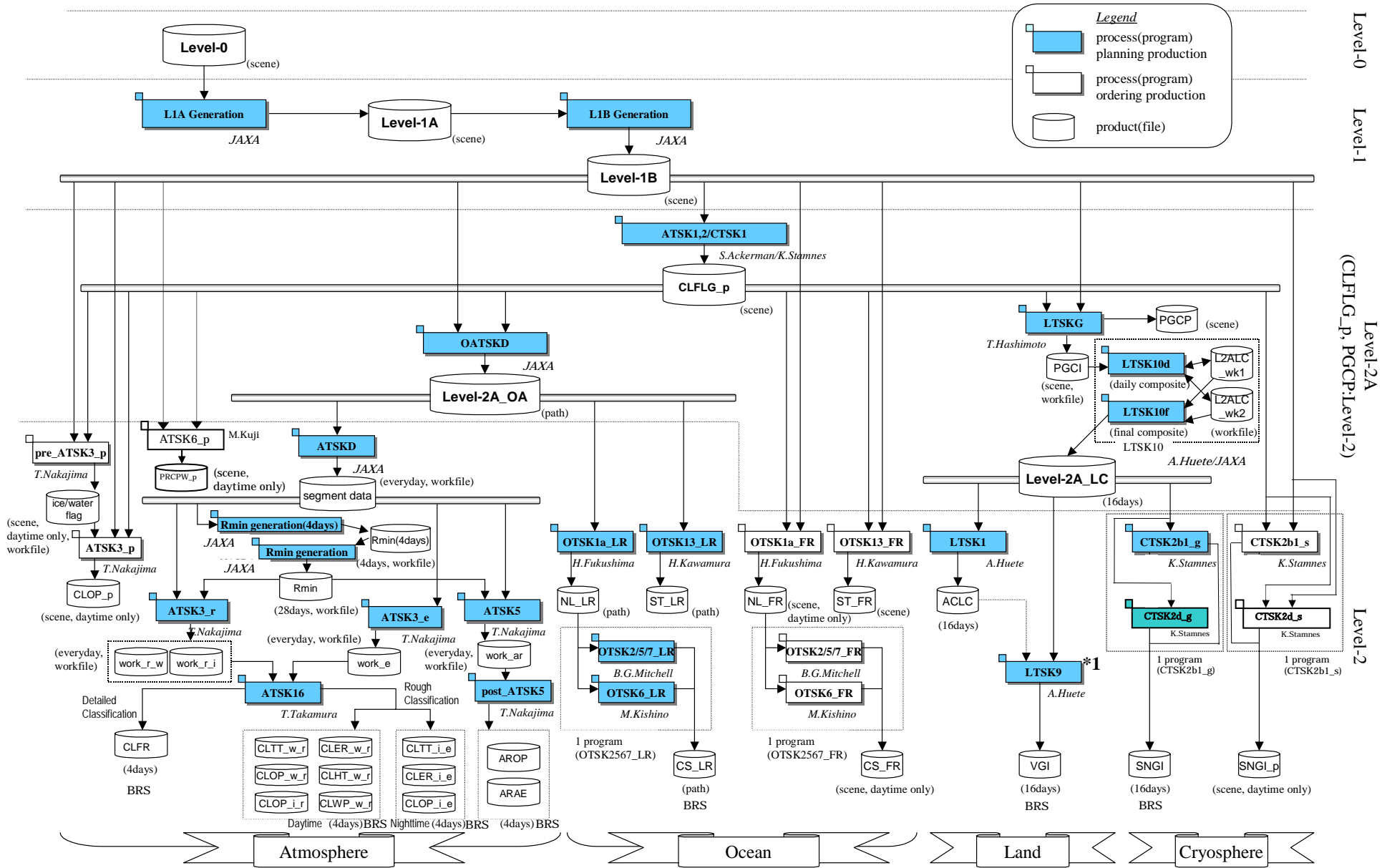
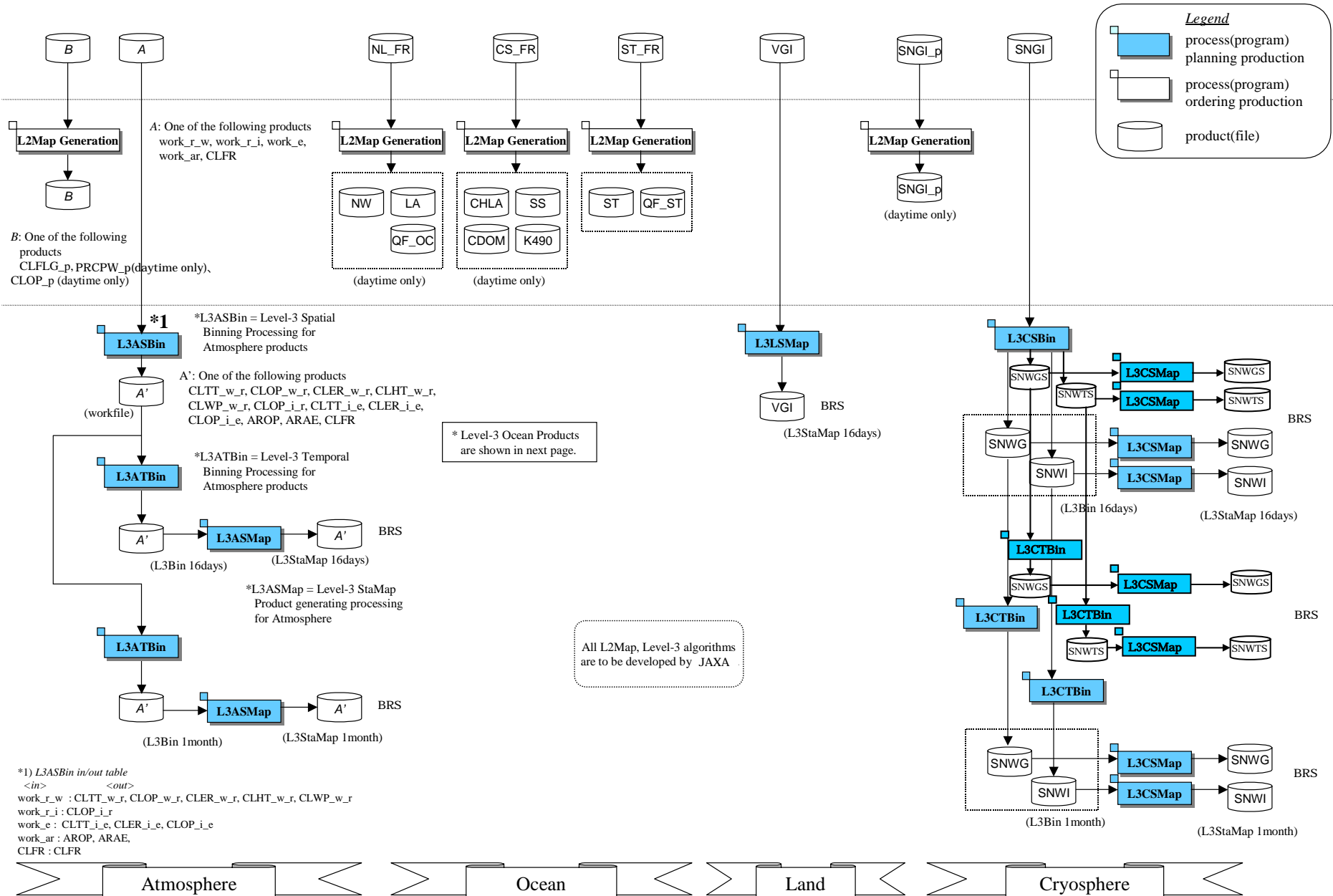


GLI Standard Products Flow(1/3)

Ver.2.0
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GLI Standard Products Flow(2/3)






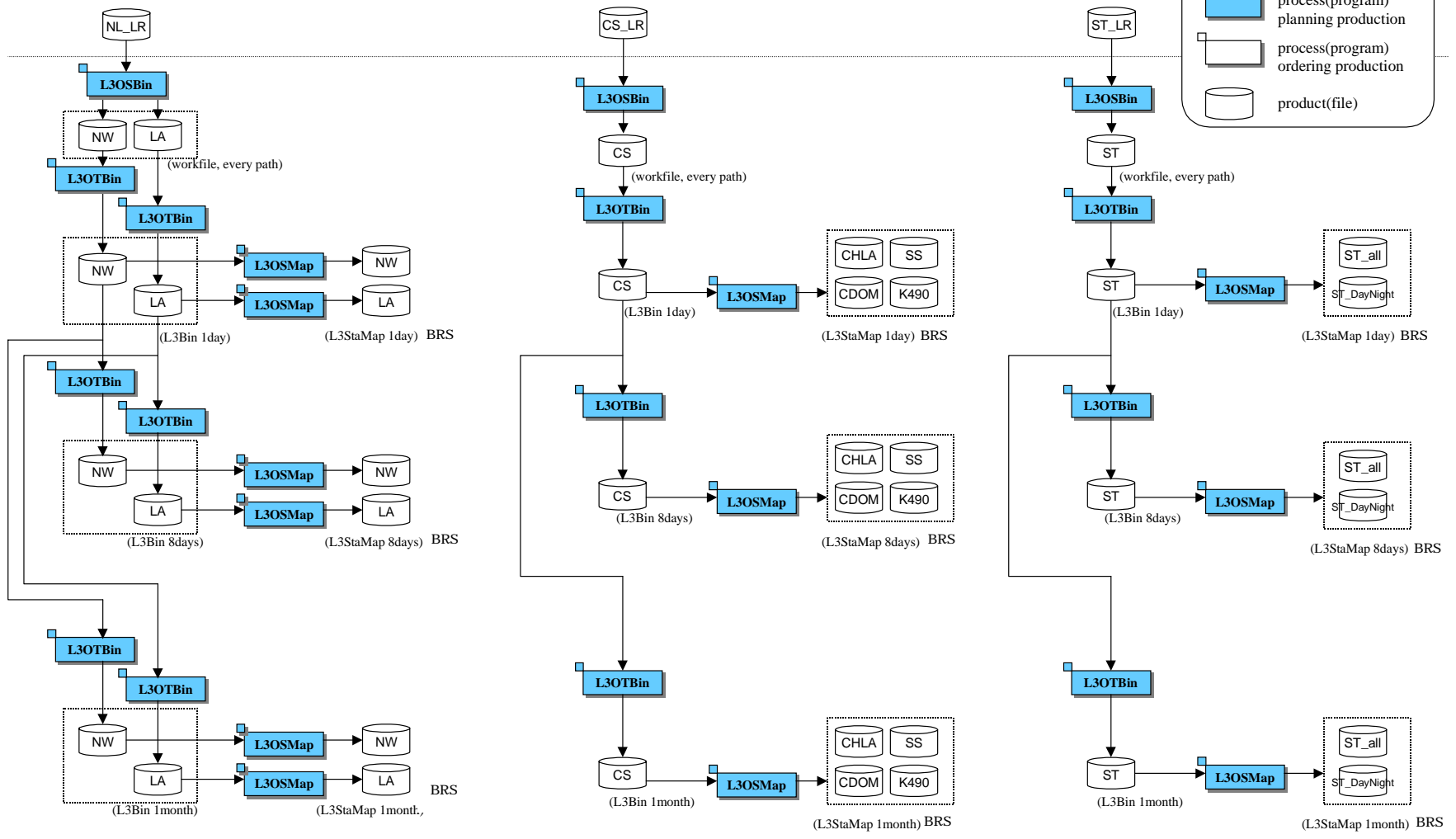
GLI Standard Products Flow(3/3)

Level-2

Level-3

Legend

-  process(program) planning production
-  process(program) ordering production
-  product(file)



Product Codes and Geophysical Parameters

discipline	product code	coverage	time resolution	geophysical parameters
Atmosphere	ARAE	global	once/4days	Aerosol angstrom exponent
	AROP	global	once/4days	Aerosol optical thickness
	CLER_w_r/i.e	global	once/4days	Cloud effective particle radius
	CLFLG_p	scene		Cloud flags
	CLFR	global	once/4days	Cloud fraction of 10 cloud types. (10 geophysical parameters, CLFR0, CLFR1, ..., CLFR9)
	CLHT_w_r	global	once/4days	Cloud top height
	CLOP_p	scene		Cloud optical thickness(pixel by pixel)
	CLOP_w_r/i_r/i.e	global	once/4days	Cloud optical thickness
	CLTT_w_r/i.e	global	once/4days	Cloud top temperature
	CLWP_w_r	scene	once/4days	Cloud liquid/ice water path
	PRCPW_p	scene		Precipitable water(pixel by pixel)
w.water cloud, i.ice cloud, r.by reflection method, e.by emission method				
Ocean	NL_LR	path	14.25path/day	Normalized water-leaving radiance -NWLR(Normalized water-leaving radiance(13bands), Aerosol radiance(4bands), (749/865), a at 865nm) -QF_OC(Quality flag for ocean color)
	CS_LR	path	14.25path/day	Chlorophyll, SS and other parameters -CHLA(Chlorophyll-a), -CDOM(Absorption of colored dissolved organic matter) -K490(Attenuation coefficient at 490nm) -SS(Suspended solid weight) -QF_OC(Quality flag for ocean color)
	ST_LR	path	14.25path/day	Sea surface temperature -SST_b(Bulk sea surface temperature) -QF_ST(Quality flag for SST)
	NL_FR	scene		Normalized water-leaving radiance -NWLR(Normalized water-leaving radiance(13bands), Aerosol radiance(4bands), (749/865), a at 865nm) -QF_OC(Quality flag for ocean color)
	CS_FR	scene		Chlorophyll, SS and other parameters -CHLA(Chlorophyll-a), -CDOM(Absorption of colored dissolved organic matter) -K490(Attenuation coefficient at 490nm) -SS(Suspended solid weight) -QF_OC(Quality flag for ocean color)
	ST_FR	scene		Sea surface temperature -SST_b(Bulk sea surface temperature) -QF_ST(Quality flag for SST)
	Land	ACL_C	global	once/16days
PGCP		scene		Precise geometric corrected parameter
VGI		global	once/16days	Vegetation index
Cryosphere	SNGL_p	scene		Snow grain size, temperature and impurities -SCFG(Snow/Cloud flag) -SNWI(Snow impurities) -SNWG(Snow grain size (865nm)) -SNWGS(Snow grain size (1.64um)) -SNWTS(Snow surface temperature)
	SNGL	global	once/16days	Snow grain size, temperature and impurities -SCFG(Snow/Cloud flag) -SNWI(Snow impurities) -SNWG(Snow grain size (865nm)) -SNWGS(Snow grain size (1.64um)) -SNWTS(Snow surface temperature)

Algorithm Codes

discipline/level	algorithm code	production	processing interval	process	
Common	OATSKD	plan	each path	Data processing for Level-2A_OA(sampling, scene connection, etc)	
Atmosphere	ATSK1/2	plan	each scene	Algorithms for identifying clear sky and cloudy region	
	pre_ATSK3_p	order	---	Ice/Water cloud discrimination program	
	ATSK3_p	order	---	Retrieval algorithms of cloud parameters(pixel by pixel)	
	ATSK6_p	order	---	Retrieval algorithms of precipitation(pixel by pixel)	
	ATSK3_r	plan	1 day	Retrieval algorithms of cloud parameters(segment) (by reflection method)	
	ATSK3_e	plan	1 day	Retrieval algorithms of cloud parameters(segment) (by emission method)	
	ATSK5	plan	1 day	Retrieval algorithms of aerosol parameters	
	post_ATSK5	plan	4 days	Composite algorithms of aerosol parameters	
	ATSK16	plan	4 days	Algorithms for cloud type and fraction	
	ATSKD	plan	1 day	Data segmentation algorithm for atmosphere	
	Rmin Gen.4	plan	4 days	Minimum reflectance generation program (4 atm. seg. Rmin-4days)	
	Rmin Gen.	plan	4 days	Minimum reflectance generation program (7 Rmin-4days Rmin)	
	Ocean	(LR) OTSK1a_LR	plan	each path	Atmospheric correction algorithm
		(LR) OTSK2_LR	plan	each path	Chlorophyll-a algorithm
		(LR) OTSK5_LR	plan	each path	K490 algorithm
		(LR) OTSK6_LR	plan	each path	Suspended solid algorithm
(LR) OTSK7_LR		plan	each path	Colored dissolved organic matter algorithm	
(LR) OTSK13_LR		plan	each path	SST(bulk) Algorithm	
(FR) OTSK1a_FR		order	---	Atmospheric correction algorithm	
(FR) OTSK2_FR		order	---	Chlorophyll-a algorithm	
(FR) OTSK5_FR		order	---	K490 algorithm	
(FR) OTSK6_FR		order	---	Suspended solid algorithm	
Land	(FR) OTSK7_FR	order	---	Colored dissolved organic matter algorithm	
	(FR) OTSK13_FR	order	---	SST(bulk) Algorithm	
	Land L2SKG	plan	each path	Precise geographical position	
	Land L2SK1	plan	16 days	Algorithms for atmospheric correction and reflectance	
	Land L2SK9	plan	16 days	Vegetation Index Algorithm	
	Land L2SK10d	plan	1 day	Data mosaicking (daily mosaicking)	
Cryosphere	Land L2SK10f	plan	16 days	Data mosaicking (final selection)	
	Cryosphere CTSK1	plan	each scene	Cloud detection algorithm(1a:cloud/snow discriminator,1b:snow/ice discriminator)	
	(global) CTSK2b1_g	plan	16 days	Algorithm for snow grain size and impurities	
	(global) CTSK2d_g	plan	16 days	Algorithm for snow surface temperature in cryosphere	
(scene)	(scene) CTSK2b1_s	order	---	Algorithm for snow grain size and impurities	
	(scene) CTSK2d_s	order	---	Algorithm for snow surface temperature in cryosphere	
L2Map	L2Map Gen.	order	each scene	Map projection algorithm for scene type products	
L3	L3ASBin	plan	1day, 4 days	Atmosphere Spatial Binning algorithm	
	L3ATBin	plan	16days, 1month	Atmosphere Temporal Binning algorithm	
	L3ASMap	plan	16days, 1month	Atmosphere L3Sta Map product generation algorithm	
	L3OSBin	plan	each path	Ocean Spatial Binning algorithm	
	L3OTBin	plan	1, 8days, 1month	Ocean Temporal Binning algorithm	
	L3OSMap	plan	1, 8days, 1month	Ocean L3Sta Map product generation algorithm	
	L3LSMap	plan	16days	Land L3Sta Map product generation algorithm	
	L3CSBin	plan	16days	Cryosphere Spatial Binning algorithm	
	L3CTBin	plan	1month	Cryosphere Temporal Binning algorithm	
L3CSMap	plan	16days	Cryosphere L3Sta Map product generation algorithm		

List of GLI Level-2 Standard Products

Discipline	Standard Product Classification	Product Details(Product Code)		Geophysical Parameter(Code)
1. Atmosphere (15 products)	Aerosol property	segment analysis	Aerosol Angstrom Exponent(ARAE)	
			Aerosol Optical Thickness(AROP)	
	Cloud property	pixel by pixel analysis	Cloud flag(CLFLG_p)	
			Cloud Optical Thickness(CLOP_p)	
			Precipitable Water(PRCPW_p)	
		segment analysis	Cloud Effective Particle Radius of water cloud by reflection method (CLER_w_r)	
			Cloud Effective Particle Radius of ice cloud by emission method(CLER_i_e)	
			Cloud Optical Thickness of water cloud by reflection method (CLOP_w_r)	
			Cloud Optical Thickness of ice cloud by reflection method (CLOP_i_r)	
			Cloud Optical Thickness of ice cloud by emission method (CLOP_i_e)	
			Cloud Top Height of water cloud by reflection method (CLHT_w_r)	
			Cloud Top Temperature of water cloud by reflection method (CLTT_w_r)	
			Cloud Top Temperature of ice cloud by emission method (CLTT_i_e)	
			Cloud Liquid / Ice Water Path of water cloud by reflection method (CLWP_w_r)	
			Cloud fraction of 10 cloud types (CLFR)	
2. Ocean (6 products)	Atmospheric Correction Products	Full resolution (1-km resolution, scene unit)(NL_FR)	- Normalized water-leaving radiance(NWLR) that consists of Normalized water-leaving radiance (13bands), Aerosol radiance(4bands), Angstrom exponent, Aerosol thickness - 4-byte quality flag (QF_OC)	
		Low resolution(4-km resolution, path unit)(NL_LR)		
	In-water Particles Products	Full resolution (1-km resolution, scene unit)(CS_FR)		- Chlorophyll-a (CHLA) - Absorption of colored dissolved organic matter(CDOM) - Attenuation coefficient at 490nm (K490) - Suspended solid weight (SS) - 4-byte quality flag (QF_OC)
		Low resolution(4-km resolution, path unit)(CS_LR)		
	SST Products	Full resolution (1-km resolution, scene unit)(ST_FR)		- Bulk Sea surface temperature(SST_b) - 2-byte quality flag (QF_ST)
		Low resolution(4-km resolution, path unit)(ST_LR)		
3. Land (3 products)	Atmospheric correction	Atmospheric correction(ACLIC) ¹⁾	- Atmospheric corrected radiance data	
	Precise Geolocation	Precise Geometric Corrected Parameter(PGCP)	- precise geometric corrected map projection parameter	
	Vegetation index	Vegetation index(VGI) ²⁾	- NDVI - EVI	
4. Cryosphere (2 products)	Snow grain size/ Impurities	Scene data (1-km resolution) (SNGI_p)	- Snow/Cloud flag(SCFG) - Snow impurities (SNWI) - Snow grain size(865nm) (SNWG) - Snow grain size(1.64um) (SNWGS) - Snow surface temperature (SNWTS)	
		Global data (SNGI) ³⁾		

1) ACLIC has 56 localized areas. North and south polar region (>50N, <50S) is divided into 4 areas for each. Middle latitude region (60S-60N) is divided into 48 areas (30degree by 30degree)

2) VGI has 5 localized areas. North polar region (>50N), North middle latitude region (20N-60N), Equator region (20S-20N), South middle latitude region (20S-60S), South polar region (>50S)

3) SNGI (global) has 4 localized areas. North polar region (>50N), North middle latitude region (20N-60N), South middle latitude region (20S-60S), South polar region (>50S)